

## **8. Relocate the Percival Cove fish rearing operation and rehabilitate Percival Cove for other users.**

*[For additional information regarding this objective, refer to pages 4-1 to 4-9 in the Capitol Lake Adaptive Management Plan - 1999 to 2001 (1999).]*

### **BACKGROUND**

Since 1952, the Washington Department of Fish and Wildlife (WDFW) has been actively involved in salmon production and fishery enhancement in the Deschutes-Capitol Lake Watershed. Historic release rates of hatchery Chinook salmon have ranged from over 12,000,000 sub-yearlings in 1973, to the present program of 3,800,000 sub-yearling and 200,000 yearlings each spring. Each release size contributes to different segments of the harvest spectrum, and each survives and contributes at different rates, depending on rearing and ocean survival conditions.

Southern Puget Sound salmon and fisheries enhancement began prior to the construction of Capitol Lake in 1951. Tumwater Falls was a natural barrier to the upstream migration of anadromous fish. In 1954 the Washington Department of Fisheries built a fishway around the falls, thus opening up more than 40 miles of stream habitat.

Initially, salmon fingerlings were released below Tumwater Falls and in the 1970s they were planted in a deep pool next to the old brewery across from Historical Park. The fish were fed and eventually migrated out of the lake after several weeks. This location worked very well until the river changed its course and filled in the deep pool and bird predation became a significant problem. This yearling Chinook program targets the Puget Sound recreational angler, since the yearling Chinook tend to reside in the sound in greater numbers than do the sub-yearling Chinook releases.

Beginning in 1974, approximately 1 million yearling Chinook were annually reared in Percival Cove. Losses from bird predation and declining water quality caused WDFW to reduce this number to 200,000 and confine the fish to net pens since 1988. In 1998, a new *fish health policy* between WDFW and the Treaty Tribes limits the transfer of fish between fish health zones. Fish raised at Percival Cove are initially grown outside the Deschutes watershed at the Mckeman Hatchery in Hood Canal. They are then transferred to Percival Cove in November where they are released in April of the next year.

With the Deschutes-Capitol Lake Chinook salmon program currently out of compliance with this fish health policy, a yearly variance is required for the program to continue. In addition to this issue, continued concerns about declining water quality have lead WDFW to search for an alternative location to Percival Cove.

To address these issues, WDFW is proposing to:

- Construct an incubation and hatching facility within this fish health zone, and
- Construct a new rearing facility with a protected water source and rearing ponds large enough to maintain the Deschutes-Capitol Lake program.

Early in 2002 WDFW exercised its option to renew the Percival Cove lease with GA, for another 10 years or until November 2011. However, the fish rearing operation in the cove must meet Washington Department of Ecology water quality requirements. If these water quality standards cannot be achieved, then WDFW will terminate the use of the cove for fish rearing purposes. WDFW is exploring a number of potential sites for this replacement facility. The department is hopeful that the new hatchery facility can be funded, built and be operational by mid-decade. WDFW has hired a consultant to evaluate these sites, prepare a conceptual site plan and develop a preliminary cost. It is likely that a plan to rehabilitate Percival Cove will also be warranted.

#### **Activities in Years 2003 - 2005:**

Subject to funding and permits, it is likely that the construction of the Percival Cove replacement facility will occur in this period of time.

#### **CLAMP Budget 2003 - 2005:**

The cost to construct a replacement facility for Percival Cove will be contained in the WDFW capital budget.

#### **Activities in Years 2005 - 2013:**

Restoration of Percival Cove will likely occur during this time period.

#### **CLAMP Budget 2005 - 2013:**

The cost to rehabilitate will be contained in the WDFW capital budget.



*Salmon net pens in Percival Cove, c. 1998.  
Courtesy of Thurston Regional Planning Council.*



*Feeding fingerling salmon in Percival Cove, c. 1986.  
Courtesy of Thurston Regional Planning Council.*